

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

104509056

DT09 Rec'd PCT/PTO 24 SEP 2004

Applicant(s): **KINGSLEY, Simon Philip et al.** Examiner: **Not Yet Assigned**

Serial No.: **Not Yet Assigned** Group Art Unit: **Not Yet Assigned**

Filed: **Filed Herewith**

Title: **DIELECTRIC RESONATOR ANTENNA**

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, this Information Disclosure Statement includes Form PTO-1449:

1. ☒ listing documents including patents, publications and other information for consideration by the Examiner, however, since the subject application was filed after June 30, 2003, copies of United States patents, and/or United States patent applications, and/or United States patent application publications are not included in this information disclosure statement; and/or
2. ☐ listing documents including patents, publications and other information that have been previously cited or submitted to the Patent Office in prior application U.S. Serial No. _____, filed _____ which is properly identified and relied on for an earlier effective filing date under 35 U.S.C. 120 for consideration by the Examiner; however, in accordance with 37 C.F.R. 1.98(d), copies of such documents are not included in this information disclosure statement; and/or
3. ☐ listing documents including patents, publications, and other information for consideration by the Examiner, copies of which are included with this information disclosure statement;

APPLICANTS:
SERIAL NO.:
FILED:

KINGSLEY, Simon Philip et al.
Not Yet Signed
Filed H [redacted] th

DT09 Re PCT/PTO 24 SEP 2004

10/509056

Page 2

4. ☐ listing other information for the Examiner's consideration which was cited in a communication from a foreign patent office in a counterpart foreign application, a copy of which is included with this information disclosure statement.

The information herein cited is only in fulfillment of Applicant(s) duty of candor in disclosing all information brought to Applicant(s) attention. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art". If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant(s) reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant(s) further reserve(s) the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

In accordance with MPEP Sections 609 and 707.05(b), it is requested that each and every document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application and is evidence that the Examiner has considered the document.

This Information Disclosure Statement is being filed:

- I) ☒ Within three (3) months of filing the subject Application or entry of the subject Application into the national stage or before mailing of the first Office Action on the merits of the subject Application or a request for continued examination thereof, whichever event occurs last pursuant to of 37 C.F.R §1.97 (b); or
- II) ☐ After the period specified in (I) but before the mailing date of either a final Official Action under 37 C.F.R §1.113 or a notice of allowance under 37 C.F.R §1.311 whichever occurs first and;

1. ☐ the undersigned hereby states that each item of information listed on the Form PTO-1449 was either (i) cited in a communication from a foreign patent

• APPLICANTS:
-- SERIAL NO.:
FILED:

KINGSLEY, Simon Philip et al.
Not Yet Signed
Filed H [redacted] th

10/509056
DT09 Rec'd PCT/PTO 24 SEP 2004

Page 3

office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement or (ii) not cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, not known to any individual designated in §1.56(c) more than three (3) months prior to the filing of this information disclosure statement; or

2. ☐ the undersigned hereby authorizes the Patent Office to charge the fee in the amount of \$180.00 under 37 C.F.R §1.17 (p) to Deposit Account 05-0649.

III) ☐ After the period in (I) and (II) but before the payment of the issue fee and,

1. The undersigned hereby states:

a) ☐ that each item of information cited on the form PTO-1449 was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three (3) months prior to the filing of this Information Disclosure Statement; or

b) ☐ that no items of information contained in Form PTO-1449 was cited in a communication from a foreign patent office in a counterpart foreign application, and to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; and

2. ☐ The undersigned hereby authorizes the Patent Office to charge the Petition fee in the Amount of \$180.00 under 37 C.F.R §1.17 (p) to Deposit Account 05-0649.

- APPLICANTS: KINGSLEY, Simon Philip et al.
- SERIAL NO.: Not Yet Assigned
FILED: Filed He [redacted]

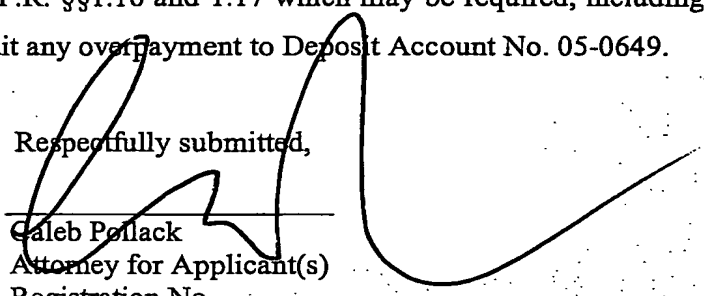
0/509056

DT09 Rec'd PCT/PTO 24 SEP 2004

Page 4

Except for issue fees payable under 37 C.F.R. §1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 05-0649.

Respectfully submitted,


Caleb Pollack
Attorney for Applicant(s)
Registration No.

Dated: September 23, 2004

Eitan, Pearl, Latzer & Cohen Zedek, LLP.
10 Rockefeller Plaza, Suite 1001
New York, New York 10020
Tel: (212) 632-3480
Fax: (212) 632-3490

Under the Paperwork Reduction Act of 1995, persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	Not Yet Assigned
		Filing Date	Filed by 609056
		First Named Inventor	KINGSLEY, Simon Philip
		Group Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
Sheet 1 of 2	Attorney Docket Number	P-7188-US	

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	A	6323824 B1		Heinrichs, et al.	Nov 27, 2001	
	B	2001/0043158 A1		Adachi, et al.	Nov 22, 2001	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				
	C	CA	2201048		Ittipiboon, et al	March 26, 1997		
	D	EP	0801436 A2		Ittipiboon, et al	Oct 15, 1997		
	E	GB	2268626 A		Adrian Forrest Fray	Jan 12, 1994		
	F	JP	200000367 08		Haishi, et al	Feb 2, 2000		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	G	BIRAND, M.T. AND GELSTHORPE, R.V.: "Experimental millimetric array using dielectric radiators fed by means of dielectric waveguide", Electronics Letters, 1983, 17, (18), pp 633-635	
	H	Chow, et al., "Cylindrical Dielectric Resonator Antenna Array", Electronics Letters, IEE Stevenage, GB vol. 31, no. 18., 31 Aug 1995 (1995-08-31), pgs 1536-1537.	
	I	Ittipiboon, et al., "Aperture Fed Rectangular and Triangular Dielectric Resonators for use as Magnetic Dipole Antennas", Electronics Letters, 1993, 29, (23), pp 102-2002.	
	J	JUNKER, G.P., KISHK, A.A. AND GLISSON A.W.: "Numerical analysis of dielectric resonator antennas excited in the quasi-TE modes", Electronics Letters, 1993, 29, (21), pp 1810-1811	
	K	KAJFEZ, D. AND GUILLON, P.(Eds): " Dielectric resonators", Artech House, Inc, Norwood, MA, 1986	

Examiner Signature	Date Considered
--------------------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Best Available Copy

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	Not Yet Assigned
				Filing Date	Filed Herein 10/5/09056
				First Named Inventor	KINGSLEY, Simon Philip
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	P-7188-US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	L	KINGSLEY, S.P., O'KEEFE, S.G. AND SAARIO S.: "Characteristics of half volume TE mode cylindrical dielectric resonator antennas", to be published in IEEE Transactions on Antennas and Propagation, January 2002	
	M	KINGSLEY, S.P. and O'KEEFE, S.G., "Beam steering and monopulse processing of probe-fed dielectric resonator antennas", IEE Proceedings - Radar Sonar and Navigation, 146, 3, 121 - 125, 1999.	
	N	KISHK, A.A., JUNKER, G.P. AND GLISSON A.W.: "Study of broadband dielectric resonator antennas", Published in Antenna applications Symposium, 1999, p. 45.]	
	O	KRANENBURG, R.A. and LONG, S.A.: "Microstrip Transmission Line Excitation of Dielectric Resonator Antennas", Electronics Letters, 1994, 24, (18), pp 1156-1157	
	P	LONG, S.A., McALLISTER, M.W., and SHEN, L.C.: "The Resonant Cylindrical Dielectric Cavity Antenna", IEEE Transactions on Antennas and Propagation, AP-31, 1983, pp 406-412.	
	Q	LEUNG, K.W., LO, H.Y., LUK, K.M. AND YUNG, E.K.N.: "Two-dimensional cylindrical dielectric resonator antenna array", Electronics Letters, 1998, 34, (13), pp 1283-1285	
	R	McALLISTER, M.W., LONG, S.A. and CONWAY G.L.: "Rectangular Dielectric Resonator Antenna", Electronics Letters, 1983, 19, (6), pp 218-219.	
	S	Mongia, et al., "Dielectric Resonator Antennas - A Review and General Design Relations for Resonant Frequency and Bandwidth", International Journal of Microwave and Millimeter-Wave Computer-Aided Engineering, 1994, 4, (3), pp 230-247.	
	T	Mongia, et al., "A Half-Split Cylindrical Dielectric Resonator Antenna Using Slot-Coupling", IEEE Microwave and Guided Wave Letters, 1993, 3, (2), pp. 38 - 39.	
	U	Mongia, et al., "Theoretical and Experimental Investigations on Rectangular Dielectric Resonator Antennas", IEEE Transactions on Antennas and Propagation, IEEE Inc., New York, US, vol. 45, no. 9.	
	V	PETOSA, A., ITTIPIBOON, A. AND CUHACI, M.: "Array of circular-polarized cross dielectric resonator antennas", Electronics Letters, 1996, 32, (19), pp 1742-1743	
	W	PETOSA, A., MONGIA, R.K., ITTIPIBOON, A. AND WIGHT, J.S.: "Design of microstrip-fed series array of dielectric resonator antennas", Electronics Letters, 1995, 31, (16), pp 1306-1307	
	X	PETOSA, A., ITTIPIBOON, A., CUHACI, M. AND LAROSE, R.: "Bandwidth Improvement for microstrip-fed series array of dielectric resonator antennas", Electronics Letters, 1996, 32, (7), pp 608-609	
	Y	WU, Z.; DAVIS, L.E. AND DROSSOS, G.: "Cylindrical dielectric resonator antenna arrays ", Proceedings of ICAP - 11th International Conference on Antennas and Propagation, 2001, p. 668	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Best Available Copy